

In the discussion which followed Mr. Martindale spoke of the importance of learning still more of the distribution of this species. Mr. Canby thought it a good species. He had specimens in his herbarium from N. Carolina collected by Curtis.

Resolutions were heartily adopted thanking the Botanical Club of Washington for the handsome souvenirs, and for other attentions, which added to the pleasure of the botanists in attendance upon the association.

The following officers were elected for the next meeting: President, V. M. SPALDING, of Ann Arbor, Mich., Vice-President, J. M. COULTER, of Bloomington, Ind., Secretary, D. G. FAIRCHILD, of Washington, D. C.

**The Botanical Section of the American Association of Agricultural Colleges and Experiment Stations.—
Washington Meeting.**

GEO. F. ATKINSON, SEC'Y *pro tem.*

The Section met August 13, in Columbian University, with Chairman B. D. Halsted presiding and Geo. F. Atkinson as secretary *pro tem.* No program being prepared the chairman called upon the members for volunteer papers and discussions.

TRACY, of Mississippi, outlined a plan for the *botanical exhibit at the Columbian Exposition.* Various subjects have already been assigned to specialists, and station workers in botany are requested to suggest other lines of investigation they are engaged upon than those included in the subjects already apportioned. Each one should estimate the amount of space his exhibit would require. The Department of Agriculture will probably provide uniform labels and probably also uniform size and quality of sheets for mounting specimens. Botanists have shown great interest in undertaking the work. Considerable discussion followed in reference to the proper place for the exhibit of fungicides and spraying machinery. The general sentiment seemed to be in favor of a combined exhibit of fungicides and insecticides and machinery, by the botanists, horticulturists, entomologists, and agri-

culturists. On motion of Mr. Tracy the following resolution was adopted.

Resolved, that the botanical section call the attention of the various heads of the entomological, horticultural, and agricultural sections to the desirability of a collective exhibit of fungicides, insecticides, and apparatus in a single alcove.

ALWOOD, Virginia, made some remarks upon a recent severe attack of a *fungus disease upon apple leaves* in certain orchards in Virginia. Many trees lost 50-75 per cent. of their leaves, and the growth was greatly interfered with, the old orchard at the college being nearly defoliated. He exhibited specimens of the diseased leaves. It has increased in severity during three years. The life history of the fungus has not been studied, but the speaker claimed to have checked the progress of the disease by the use of a weak preparation of the Bordeaux mixture.

BREWER, Connecticut, exhibited some *English walnuts* grown by a friend from seed planted several years ago, also a butternut said to be borne on one of the trees coming from the same seed. As no positive proof could be shown the speaker thought it more likely that the butternut tree appeared there accidentally.

GORMAN, Kentucky, presented (through the chairman) a paper entitled "*A bacterial disease of cabbages.*" A rotting of the cabbage heads was traced to the work of bacteria. Inoculations produced the disease in healthy cabbages. Hot weather and a humid atmosphere are necessary to the progress of the disease. Alwood stated that the same disease occurred in Virginia. Atkinson, Alabama, spoke of a similar disease of turnips at Auburn, in which the interior of the turnips rotted, leaving the outer surface compact. Halsted, N. J., called attention to the undesirability of planting successive crops of cabbages and turnips where *Plasmodiophora* was injurious and suggested that such might be the case with this bacterial disease.

BRUNK, Maryland, spoke of the successful *treatment of Cladosporium fulvum* on tomatoes by using carbonate of copper 3 oz., carbonate of ammonia 1 lb., with 50 gallons of water. This does not spot the fruit while the ammoniacal carbonate of copper does. The merits and demerits of the various spraying machines were discussed.

At the afternoon session ATKINSON, Alabama, presented notes on some *fungus diseases of the cotton plant*, and exhib-

ited a series of colored illustrations representing the external appearance of the plant affected by the different diseases.

ALWOOD, Virginia, made some remarks on the *artificial pollination of wheat*. He exhibited the varieties of wheat artificially pollinated and the resultant crosses. The method used in the experiments was described in detail.

CRANDALL, Colorado, exhibited the *fruit of the wild service berry* (*Amelanchier alnifolia*), and spoke of attempts being made to domesticate the fruit.

On the 14th the section was called to order by the chairman at 2:30 P. M.

Officers were elected for the ensuing year: GEO. F. ATKINSON, Alabama, Chairman; L. H. PAMMEL, Iowa, Secretary.

PAMMEL, Iowa, presented some notes on *a destructive disease of the cherry*, caused by a *Cladosporium*. The damage amounted to 25 per cent. The disease is also common on wild plums.

An informal discussion followed upon the germination of seeds of *Vaccinium*; the distribution of plants as governed by character of soil, heat, moisture, etc.

HALSTED, New Jersey, presented *Notes upon Monilia fructigena and spore germination*.—This cherry fungus was collected upon excrescences of a wild plum, caused by *Taphrina Pruni*, in Mississippi, and cherries were inoculated with it. These became badly diseased, while the checks remained sound. Inoculation showed that the fungus would grow also upon green and ripe tomatoes, and other vegetable substances, though not so well as upon cherries. The action of fungicides was tested upon spore germination, the cultures being attempted in concave ground slides. A piece of metallic copper foil, thoroughly scoured, as large as the end of a lead pencil, was placed in the bottom of the cell in the water. The spores failed to germinate in presence of this copper foil. Tests were also made with ammoniacal carbonate of copper compound of various strengths, beginning with the strongest, i. e., three ounces of carbonate of copper to one quart of ammonia. Spores were killed by this, also by the half, fifth and twentieth strength. Again one part of the fungicide of vineyard strength was added to ninety-nine parts water. Spores failed

to germinate in this, but when washed with pure water several times they germinated. These experiments suggest that perhaps fungi can be successfully combated with fungicides of far less strength than now employed.

BRIEFER ARTICLES.

Oligonema.—In my recent paper upon the new species of Mr. Pringle's last year's collection in Mexico I founded a new genus, *Oligonema*, upon a remarkable asteroid composite. I supposed that I had taken all possible pains to make sure that the name was not pre-occupied, but I have since learned through the kindness of Mr. C. F. Peck that there is a genus of the same name among the *Myxomycetes*, established by Rostafinski. As it is necessary, therefore, to make a change, I propose to substitute the meaningless name *Golionema*, formed by simply changing the position of a single letter and in some degree suggestive of the original. The new species consequently becomes *Golionema heterophyllum*.—SERENO WATSON, *Cambridge, Massachusetts*.

EDITORIAL.

THOSE ARE not particularly difficult questions which Professor MacMillan asks in "Open Letters."

The only answer to the first is, "that depends." The answer is certainly not to be found in any cast-iron rules, though the inexperienced may fondly imagine so. If we understand the problems of nomenclature they require a judicial attitude on the part of the student. He has a code of laws—doubtless imperfect; doubtless capable of improvement by the application of the two decades of experience which has been acquired since they were framed—and by the principles set forth in this code he is to be guided. In addition to the code he is to use his common sense — if he has any — in determining what name is to stand. What were the use of the judge on the bench if he have no discretion in the interpretation, application or even suspension of the law in particular cases? To say that the laws of nomenclature are to be inflexible and of universal applicability is quite as absurd as to endeavor to make civil statutes so. It would be wonderfully convenient if this could be attained, even with the law of priority, but it seems quite impossible to secure rigidity without absurdity.